

1. A method of programming an electronic monitoring tag attached to a printing apparatus replaceable module, the method comprising:

electronically reading tag identification data from an electronic monitoring tag associated with the replaceable module;

electronically verifying that the tag identification data matches predetermined identification criteria; and

If the tag identification data matches the predetermined identification criteria, electronically programming the electronic monitoring tag with tag content.

2. The method of claim 1, wherein programming the electronic monitoring tag with tag content comprises selectively programming the electronic monitoring tag with first configuration information or with second configuration information.

3. The method of claim 2 additionally comprising:

providing user input information comprising first configuration setup information or second configuration setup information; and

programming the electronic monitoring tag comprises programming the electronic monitoring tag with first configuration information if the user input information comprises first configuration setup information, and programming the electronic monitoring tag with second configuration information if the user input information comprises the second configuration setup information.

4. The method of claim 2, additionally comprising:

transmitting first operating information to the printer if the electronic monitoring tag has been programmed with the first configuration information; and

transmitting second operating information to the printer if the electronic monitoring tag has been programmed with the second configuration information.

5. The method of claim 1, wherein:

verifying that the tag identification data matches the predetermined identification criteria comprises determining whether the tag identification data matches a first predetermined identification criteria or a second predetermined identification criteria; and

programming the electronic monitoring tag with tag content comprises programming the electronic monitoring tag with first configuration information if the tag identification data matches the first predetermined identification criteria, or programming the electronic monitoring tag with second configuration information if the tag identification data matches the second predetermined identification criteria.

6. The method of claim 5, additionally comprising:

reading tag authentication data from the electronic monitoring tag;

verifying that the tag authentication data matches predetermined authentication criteria; and

programming the electronic monitoring tag with tag content only if the tag authentication data matches the predetermined authentication criteria.

7. The method of claim 6, wherein reading the tag authentication data comprises:

electronically transmitting an authentication request signal to the electronic monitoring tag;

causing the electronic monitoring tag to calculate an authentication response; and

electronically receiving the authentication response from the electronic monitoring tag.

8. The method of claim 1, wherein programming the electronic monitoring tag with first tag content comprises programming the tag with tag information relating to the subsequent use of the printing apparatus replaceable module.

9. A programming device for programming electronic monitoring tags that are associated with printing apparatus replaceable modules, the programming device comprising:

a tag writer adapted to program tag content into electronic monitoring tags;

a tag reader;

wherein the tag reader is adapted to read tag identification data from a first electronic monitoring tag associated with a printing apparatus replaceable module; and

a data verifier in communication with the tag reader;

wherein the data verifier is adapted to determine if tag identification data matches predetermined identification criteria; and

wherein the data verifier is adapted to authorize the tag writer to program the tag content into the first electronic monitoring tag only if the data verifier determines that the tag identification data matches the identification criteria.

10. The programming device of claim 9, additionally comprising:

a user input element for receiving user instructions;

wherein the tag writer is adapted to program first tag content into the first electronic monitoring tag if the user input element receives a first user instruction, and the tag writer is adapted to program second tag content into the first electronic monitoring tag if the user input element receives a second user instruction.

11. The programming device of claim 10, wherein:
  - the data verifier is additionally adapted to determine if the user instructions match predetermined user criteria; and
  - the data verifier is additionally adapted to authorize the tag writer to program the tag content into the first electronic monitoring tag only if the data verifier additionally determines that the user instruction match the predetermined user criteria.
12. The programming device of claim 9, wherein:
  - the data verifier is adapted to determine whether the tag identification data matches first identification criteria or second identification criteria;
  - the tag writer is adapted to authorize the tag writer to program first tag content into the first electronic monitoring tag only if the data verifier determines that the tag identification data matches the first identification criteria; and
  - the tag writer is adapted to authorize the tag writer to program second tag content into the first electronic monitoring tag only if the data verifier determines that the tag identification data matches the second identification criteria.
13. The programming device of claim 9, wherein:
  - the tag writer comprises a writer wireless communication element for transmitting programming information; and
  - the data receiver comprises a reader wireless communication element for receiving the tag identification data.
14. The programming device of claim 13, wherein the writer wireless communication element and the receiver wireless communication element are formed of a single wireless communication element.

15. A programming device for programming electronic monitoring tags that are associated with printing apparatus replaceable modules, the programming device comprising:

a tag writer;

wherein the tag writer comprises a wireless communication element and is adapted to program either first tag content or second tag content into electronic monitoring tags using the wireless writer communication element;

a tag reader;

wherein the tag reader comprises a wireless communication element and is adapted to read tag identification data from a first electronic monitoring tag associated with a printing apparatus replaceable module using the wireless reader communication element; and

a user input element for receiving user instructions;

a data verifier in communication with the tag reader, the user input element, and the tag writer;

wherein the data verifier is adapted to determine whether the tag identification data received by the tag reader matches predetermined tag identification criteria;

wherein the data verifier is adapted to authorize the tag writer to program the first tag content into the first electronic monitoring tag only if the data verifier determines that the received tag identification data matches the tag identification criterion and the user input element receives a first user instruction; and

wherein the data verifier is adapted to authorize the tag writer to program the second tag content into the first electronic monitoring tag only if the data verifier determines that the received tag identification data matches the tag identification criterion and the user input element receives a second user instruction.

16. The programming device of claim 15, wherein the wireless writer communication element and the wireless reader communication element are a common wireless communication element.

17. The programming device of claim 15, wherein:  
the tag writer is a portable tag writer; and  
the tag reader is a portable tag reader.